

# **I236L User's Manual**



# i236L

# Professional Class 2 Microphone

www.micwaudio.com

# **CALIBRATION REPORT**

# **Product Information**

Model No: <u>i236L</u> Serial No: <u>\_\_\_\_</u> Description: 1/2" Free Field Digital Microphone with Lightning Connector Calibration Data Sensitivity: \_\_\_\_\_dBFS NoiseLab Correction:\_\_\_dB Technician:\_\_\_\_\_ Date: \_\_\_yyyy/mm/dd TEST ENVIRONMENTAL CONDITIONS Temperature: <u>25°C</u>

Humidity: 65% Pressure: <u>101.3kPa</u>

Notes:

- The reference microphone for calibratiaon is traceable from the National Institute of Metrology(NIM).
- 2. Calibration is performed in compaliance with ISO9001:2008.
- 3. Measurement uncertainty is +/-0.30dB (95% confidence level with a coverage factor of



2).

- 4. Frenency response is measured by a comparison method "BSWA-III-RD01-0013".
- 5. Sound Level meter Class 2( IEC61672-3) was certified with NoiseLab App by Scantek USA and NIM Lab.

### 1. INTRODUCTION

Welcome to the MicW i-Series of professional microphones. MicW has been designing and manufacturing high quality microphones for testing, measuring and studio recording for over 10 years. The expertise in diaphragm technology allows MicW to provide professional products for audio applications.

### 2. SAFETY INSTRUCTION

The microphone come with a pre-polarized capsule, which is tested in extreme temperatures and humid environments for more than 24 hours. It is designed to operate from -20 $^{\circ}$ C to 50 $^{\circ}$ C and humidity up to 95%.

## 3. Power Supply

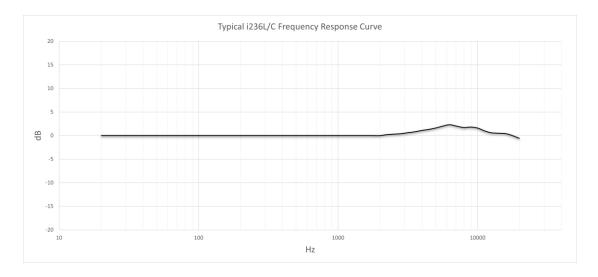
The i236L does not require an additional battery for power.





**MicW** i236L is 1/2" prepolarized free-field digital measurement microphone. It has omni-directional pattern. It is an ideal choice for iPhone, iPad mobile (iOS Lightning or Type C connectors) devices as external microphone. The i236L is developed based on BSWA MPA436 array microphone which is widely used in aerospace and automotive industry.

# 5. FREQUENCY REPONSE



## Typical Frequency Response.

Frequency (Hz)	FRes (dB)	Frequency Hz)	FRes (dB)	Frequency (Hz)	FRes (dB)
16	0.3	250	-0.1	4000	0.1
32	0.7	500	0.0	8000	1.4
64	0.5	1000	0.0	16000	0.2
125	0.2	2000	0.0	20000	-3.7



Simply plug the i236L into your lightning connector of the iPhone, iPad device.



i236L matched with NoiseLab software on iPhone 14 Pro.

## 7. WARRANTY POLICY

MicW Audio warrants that its Products will be free from defects in materials and workmanship for one (1) year from the date of purchase by the original purchaser.

### 8. CE MARKING

The MicW i236L microphones conform with the relevant CE mark directives approved by the European Commission.





# 9. SPECIFICAITONS

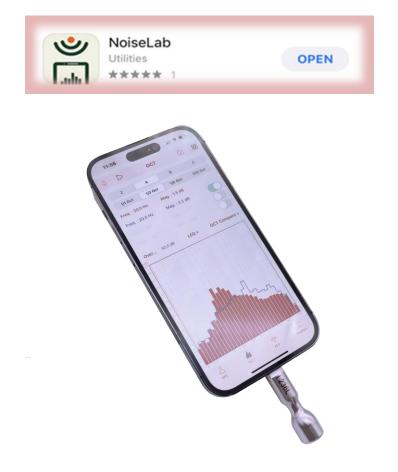
Microphone i236L				
Туре	Electret Condenser			
Capsule Diameter(front)	13.2mm			
Capsule Diameter(back)	10.0mm			
Total Length	46.6 mm			
Principle of Operation	Free-field			
Directivity	Omni			
Sensitivity	- 17.19 ± 3.0 dBFS			
The analog sensitivity of the capsule	– 28.0 dB re 1V/Pa, or 39.8mV/Pa			
Correction Factor	-5.11 ±3.0 dB tested with NoiseLab APP			
	in MID Range			
Equivalent Noise Level	23.0 dB(A)			
Upper Dynamic Limit	119.0 dB			
Frequency Range	20~20,000Hz (complied with IEC 61672			
	Class 2 requirements at reference			
	conditions)			
T.H.D	< 3% at 119dB SPL			
Operating Temperature	<b>-20</b> ℃ ~50℃			
Power Source	Plug and Play			
Polarization Voltage	0 V			
Weight	13.9g			
Connector	Lightning Connector			

## **10. PACKING LIST**

- One piece of i236L microphone
- One windscreen for i236L microphone
- No printed usermanual. Please visit <u>http://manual.bswa.com.cn</u> for the product information

# Mic W<sup>®</sup> 11. SOUND LEVEL METER APPLICATION

The system of i236L microphone and NoiseLab App on iOS device meet the requirement and pass the cetification of IEC61672 Class 2 sound level meter.



# **Requirements:**

- iOS version 10.0 or higher
- i236L microphone
- NoiseLab App

STEP 1: Search" NoiseLab" in App store on your iOS device and install the app.

STEP 2: Plug i236L into the iPhone, iPad, then launch NoiseLab

STEP 3: Go to the Calibration menu and change the Correction according to the CALIBRATION REPORT. Or calibrate the system with a standard microphone calibrator.



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MicW microphones

Product: features and specificaitons are subject to change without notice